

# **BLACKJACK**

**SYNOPSIS** 

**DETAILS OF TEAM** 

#### **NAME**

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## **ROLL NUMBER**

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#### **ABSTRACT**

In this project, we will develop a console-based Blackjack game in C++. The game will allow the player to play against a computer dealer, where the player is dealt two cards and must decide whether to take additional cards or stand with their current hand. The objective is to get a higher total point value than the dealer without going over 21 points.

We will use object-oriented programming principles to implement the game using classes such as Deck, Card, Player, and Game.

The Deck class will represent the deck of cards used in the game. It will have functions to shuffle the deck, deal a card, and reset the deck.

The Card class will represent a single playing card. It will have member variables for the card's suit and rank, and a function to return the point value of the card.

The Player class will represent the player's hand. It will have member variables for the player's cards and their total point value, as well as functions to add a card to the hand and calculate the hand's point value.

The Game class will represent the game itself. It will have member variables for the deck, the player, and the dealer, as well as functions to start a new game, deal the cards, and handle the player's decisions.

## **TOPICS TO BE USED**

- Classes, Functions
- > Dynamic Memory Allocation
- ➤ Constructor, Parameterized Constructor
- Operator Overloading
- > Inheritance
- > Polymorphism